

ILLEGIB

Approved For Release 2009/06/03 : CIA-RDP80R01731R000800100051-1

DOE review completed.

JCS review completed.

Page Denied

Approved For Release 2009/06/03 : CIA-RDP80R01731R000800100051-1

SIGNATURE RECORD AND COVER SHEET

DOCUMENT DESCRIPTION	REGISTRY
SOURCE: DCI DATE OF DOCUMENT: 9/28/49 COPY NUMBER (S): one copy NUMBER OF PAGES: one DOCUMENT NO. NUMBER OF ATTACHMENTS: three-Cy # 8 of OSI/SR	CIA CONTROL NUMBER: _____ DATE DOCUMENT RECEIVED: 9/28/49 LOGGED BY: AB 15/49/1 & 15/49; Voting Slip

ATTENTION: THIS FORM WILL BE ATTACHED TO EACH TOP SECRET DOCUMENT RECEIVED BY THE CENTRAL INTELLIGENCE AGENCY OR CLASSIFIED TOP SECRET WITHIN THE CIA AND WILL REMAIN ATTACHED TO THE DOCUMENT UNTIL SUCH TIME AS IT IS DOWNGRADED, DESTROYED OR TRANSMITTED OUTSIDE OF CIA. ACCESS TO TOP SECRET MATERIAL IS LIMITED TO THOSE INDIVIDUALS WHOSE OFFICIAL DUTIES RELATE TO THE MATERIAL. EACH ALTERNATE OR ASSISTANT TOP SECRET CONTROL OFFICER WHO RECEIVES AND/OR RELEASES THE ATTACHED TOP SECRET MATERIAL WILL SIGN THIS FORM AND INDICATE PERIOD OF CUSTODY IN THE LEFT-HAND COLUMNS PROVIDED. THE NAME OF EACH INDIVIDUAL WHO HAS SEEN THE TOP SECRET DOCUMENT AND THE DATE OF HANDLING SHOULD BE INDICATED IN THE RIGHT-HAND COLUMNS.

NOTICE OF DETACHMENT

WHEN THIS FORM IS DETACHED FROM TOP SECRET MATERIAL IT WILL BE COMPLETED IN THE APPROPRIATE SPACES BELOW AND TRANSMITTED TO CENTRAL TOP SECRET CONTROL FOR RECORD.

The Top Secret material detached from this form was:

DEGRADED

DESTROYED

DISPATCHED (OUTSIDE CIA) TO:

BY:

(SIGNATURE)

(OFFICE)

(DATE)

TOP SECRET

~~TOP SECRET~~

Pages 1a 8
Series A

C S I

C E N T R A L I N T E L L I G E N C E A G E N C Y

N U C L E A R E N E R G Y B R A N C H

S T A T U S O F T H E U . S . S . R . A T O M I C E N E R G Y P R O J E C T

An Extended Estimate for the
Joint Staff Plans Group of the
Joint Chiefs of Staff

1 October 1949

ME/SR-15/49/1

WARNING: For Limited distribution only.

49

DOCUMENT NO: _____
NO CHANGE IN CLASS
 DECLASSIFIED
CLASS. CHANGED TO: TS S 25X1
NEXT REVIEW DATE: 2011
AUTH: HR 70-2
DATE 31/3/81 REVIEWER: _____

This report has been agreed upon by the members of the Joint Nuclear Energy Intelligence Committee which is composed of representatives of the Departments of State, Army, Navy, and Air Force, the Atomic Energy Commission, and the Central Intelligence Agency.

~~TOP SECRET~~

TOP SECRETSTATUS OF THE U.S.S.R. ATOMIC ENERGY PROJECT

The Joint Nuclear Energy Intelligence Committee makes the following estimate of future U.S.S.R. bomb capabilities in the light of recent events.

1. The explosion, somewhere in Siberia on or about 28 August 1949, of a Soviet atomic bomb (presumably their first) made of plutonium confirms our previous conclusion that the Soviet atomic energy project was directed toward the production of plutonium bombs.

2. The fixing of this date has made possible the reevaluation of much fragmentary information which previously we could not interpret. This reevaluation, together with some new information, leads to the following conclusion:

The U.S.S.R. has had one and possibly two graphite-moderated production piles in operation since about October 1948. It is suspected that there is a third production pile under construction which may be in operation shortly. There is no evidence or indication that the Soviets are developing a uranium isotope separation process at the present time.

3. Based on this conclusion, on current estimates of the maximum amount of uranium available, on the assumption that the first bomb assembled was tested immediately, and on the assumption that their plants will operate at high efficiency, it is estimated that the maximum number of bombs in the Soviet stockpile will be roughly:

10	by the end of 1949
25	by mid-1950
50	by mid-1951
75	by mid-1952
110	by mid-1953

(For long range planning purposes after mid-1953, the bomb production rate may be assumed to be 40 per year; Nagasaki-type bombs have been assumed for purpose of calculation.) In making these estimates based on a plutonium bomb, it is assumed that the Soviets will put into effect by mid-1950 the more important improved procedures in pile operation recently instituted in the U. S.

4. The ultimate bomb stockpile depends not only on the supply of uranium ore, but also on the efficiency of the methods producing the fissionable materials. It is believed that the uranium ore supply is not a limiting factor now. The successful application of production methods which we can now envision will provide a more efficient utilization of their limited (relative to the U. S.) stockpile of uranium and will increase the ultimate stockpile by a substantial factor. Additional production facilities will be needed to increase the production rate significantly.

TOP SECRET

C S I

C E N T R A L I N T E L L I G E N C E A G E N C Y

N U C L E A R E N E R G Y B R A N C H

S T A T U S O F T H E U . S . S . R . A T O M I C E N E R G Y P R O J E C T

1 October 1949

OST/SR-15/49

WARNING: This document may not be reproduced without prior approval of the Director of Central Intelligence.

DOCUMENT NO. 48
NO CHANGE IN CLASS
 DECLASSIFIED
CLASS. CHANGED TO: TS S ① 25X1
NEXT REVIEW DATE: 20/11
AUTH: HR 70-2
DATE 31/3/81 REVIEWER:

This report has been agreed upon by the members of the Joint Nuclear Energy Intelligence Committee which is composed of representatives of the Departments of State, Army, Navy, and Air Force, the Atomic Energy Commission, and the Central Intelligence Agency.

~~TOP SECRET~~

~~TOP SECRET~~STATUS OF THE U.S.S.R. ATOMIC ENERGY PROJECT

The Joint Nuclear Energy Intelligence Committee makes the following estimate of future U.S.S.R. bomb capabilities in the light of recent events.

1. The explosion, somewhere in Siberia on or about 28 August 1949, of a Soviet atomic bomb (presumably their first) made of plutonium confirms our previous conclusion that the Soviet atomic energy project was directed toward the production of plutonium bombs.

2. The fixing of this date has made possible the reevaluation of much fragmentary information which previously we could not interpret. Based on this reevaluation and some new information, on current estimates of the maximum amount of uranium available, on the assumption that the first bomb assembled was tested immediately, and on the assumption that their plants will operate at high efficiency, it is estimated that the maximum number of bombs in the Soviet stockpile will be roughly:

10 by the end of 1949
50 by mid-1951
110 by mid-1953

In making these estimates based on a plutonium bomb, it is assumed that the Soviets will put into effect by mid-1950 the more important improved procedures in pile operation recently instituted in the U. S.

~~TOP SECRET~~

VOTING SLIP

AGENCY: _____

DATE: _____

SUBJECT: Report OSI/SR-15/49/1, dated 1 October 1949

Approved: _____

Approved with the following exceptions: _____

SIGNED: _____
